## Amendments to the Drawings

Fig. 1 has been amended as suggested in the Office Action. A replacement drawing sheet is submitted herewith. Fig. 1 has been amended to add step 17 with the following description: "Prune candidate single-term interpretations". This step finds ample support in the specification, at least in the discussion from page 13, line 15 to page 14, line 13. The specification has been amended to reflect the insertion of step 17 in the figure. Fig. 1 has been amended to add step 19 with the following description: "For each candidate multi-term interpretation, associate multi-term interpretation with set of items in database according to a particular semantic approach, where there are a plurality of semantic approaches". This step finds ample support in the specification, at least in the discussion from page 17, line 24 to page 18, line 21. The specification has been amended to reflect the insertion of step 19 in the figure.

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## Remarks

Claims 1-11, 13-15, 18-29, 31-33, and 36-40, are currently pending in this application. Claims 12, 16, 17, 30, 34 and 35 have been cancelled. Claims 1, 6-11, 13-15, 18-20, 2-29, 31, 33, and 36-40 are currently amended. Support for the amendments exists through the specification and no new matter has been added.

Applicants have amended the title and the specification to address the objections set forth in the Office Action. While Applicants have amended the title to make it more descriptive, the claims alone indicate the scope of the present invention. In addition, Applicants have amended Fig. 1 to address the objection set forth in the Office Action and have further amended the specification to reflect the changes to Fig. 1. In the interests of furthering prosecution, Applicants have complied with the suggestions made in the Office Action regarding the drawing; Applicants believe, however, that the features of the claims noted in section 3 of the Office Action are adequately described in and can be thoroughly understood from the written description. No new matter has been added.

In section 6 of the Office Action, the Examiner rejects claims 1, 11, 19, 29, and 37-40 under 35 U.S.C. 101 on the basis that those claims are not limited to tangible embodiments. Applicants have amended independent claims 1, 11, 37 and 38, to recite a computer-implemented method. Independent claims 19, 29, 39 and 40, originally drawn to a computer program product, are believed to provide a "practical application" as required in the Office Action. As discussed further below, the objection to the word "using" has also been addressed. As there is no longer a basis for the Examiner's rejections of claims 1-40 under 35 U.S.C. 101, Applicants respectfully request that those rejections be withdrawn.

In section 7 of the Office Action, claims 13, 14, 31 and 32 are rejected under 35 U.S.C. 112 for failing to comply with the written description requirement. Applicants have addressed the rejection of the term "maximal result set" by amending the claims to read, "a reduced set of all of the items in the database associated with any of the first, second or third candidate single-term interpretations." This claim language is supported, for example, on page 13 of the specification. Applicants respectfully request that the rejections under 35 U.S.C. 112, first paragraph, be withdrawn.

In section 6 and section 8 of the Office Action, claims 1-40 are rejected under 35 U.S.C. 101 and 35 U.S.C. 112, second paragraph, as not setting forth a proper process claim and being indefinite for reciting the word "using" and alternative forms thereof. With respect to claim 1, the amended claim language no longer recites "using" the database and now recites, for example, a step of identifying "a set of associated items in the database." Claims 11, 19, 29, 37, 38, 39, and 40 have been similarly amended. Remaining instances of "using" in the claims are believed to be proper to indicate that a claim element is "used" in a positively recited step, such as "pruning." Applicants respectfully request that the rejections under 35 U.S.C. 101 and 35 U.S.C. 112, second paragraph, for reciting "using" and alternative forms thereof, be withdrawn.

Section 8 of the Office Action further identified claims 7, 16, 17, 18, 34-36 as containing language lacking antecedent basis. The antecedent basis issues have been addressed. Applicants respectfully request that the rejections under 35 U.S.C. 112, second paragraph, for lack of antecedent basis be withdrawn.

In section 9 of the Office Action, the Examiner rejected Claims 1-11, 19-29 and 37-40 under 35 U.S.C. 103(a) as being unpatentable over Schabes (U.S. Pat. No. 6424983) in view of Woods (U.S. Pat. No. 5724571). Claim 1 has been amended to now recite: "deriving a first

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derived score for the first candidate multiple-term interpretation from the set of associated

items." The amended claim language recites the derivation of the first derived score to provide

the meaning of the word "contextual" and eliminates the use of the word "contextual". The term

"contextual" is defined, for example, on page 16, line 17 of the specification:

> In some embodiments, contextual scores for candidate multiple-term interpretations may
> be based on the number of items associated with that candidate multiple-term
> interpretation.

The remainder of the paragraph describes other ways in which the contextual score may be

derived from the set of items in the database associated with that candidate multiple-term

interpretation. Accordingly, claim 1 has been amended to recite deriving a score (i.e., the first

derived score) from the set of associated items for the first candidate multiple-term

interpretation.

Claim 1 also recites "identifying a set of associated items in the database that are

associated with the first candidate multiple-term interpretation according to a particular semantic

approach from the plurality of semantic approaches, wherein the set of associated items includes

at least two items." This claim language describes in particular that the set of associated items for

the first candidate multiple-term interpretation includes at least two items. The derived score for

the first candidate multiple-term interpretation is consequently generated across several (at least

two) items, and is a score related to the first candidate multiple-term interpretation, and not

merely a score assigned to an individual item. By highlighting a multiple-to-one correspondence

between the items in the database and a first derived score for the first candidate multiple-term

interpretation, this claim language distinguishes the first derived score for the first candidate

multiple-term interpretation from scores that are merely assigned to individual documents on a

document-by-document basis.

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Applicants submit that there is no motivation to combine Schabes with Woods. Schabes does not teach or suggest using the contents of the database to derive a score for a candidate multiple-term interpretation. Woods does not teach or suggest evaluating a candidate multiple-term interpretation. Neither Schabes nor Woods contains any suggestion that would motivate incorporating the teachings of the other. Moreover, the combination would not yield the presently claimed invention. It is only hindsight, provided by Applicants' invention, that would suggest a combination of Woods and Schabes, and specifically the modifications to Schabes and Woods that would result in the combination as set forth in the Office Action.

Neither Schabes nor Woods teaches or suggests "deriving a first derived score for the first candidate multiple-term interpretation from the set of associated items", wherein "the set of associated items includes at least two items". As noted on page 7 of the Office Action, "Schabes does not teach determining a contextual score for each candidate multiple-term interpretation and providing a plurality of semantic approaches for associating one or more candidate multiple term interpretations with items in a database." This deficiency is not cured by Woods. First, Woods is not scoring candidate multiple-term interpretations. In particular, Woods teaches , at col.. 6, lines 18-23, scoring <u>hits</u> in the database by considering term proximity in a hit document based on the query. Thus, the "score" generated in Woods, col. 6, ll. 18-23, is a score for the hit document and is generated on an individual document-by-document basis. Woods does not generate a score across at least two items in the database, as claim 1 recites. Claims 2-10 depend from claim 1 and are also believed to be allowable.

Independent claims 11, 19, 29, 37, 38, 39 and 40 have also been amended corresponding to the changes to claim 1 regarding the first derived score as set forth above, and are believed to

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be allowable for the same reasons. Claims 13-15, 18, 20-28, 31- 33, and 36 depend therefrom and are believed to be allowable on this basis.

In section 10 of the Office Action, claims 12-18 and 30-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schabes in view of Woods and Lizee (U.S. Patent No. 5,671,404). Independent claim 12 and independent claim 30 have been cancelled. Since claims 13-15, 18, and 31-33 and 36 depend from independent claims that are believed to be allowable, these claims should be allowable. Moreover, Lizee does not teach the limitation of pruning as claimed herein. Independent claim 11 now recites pruning according to a threshold: "pruning the candidate single-term interpretations, wherein the first and third candidate single-term interpretations each have more associated items than a threshold, and wherein the second candidate single-term interpretation has fewer associated items than the threshold, by eliminating the second candidate single-term interpretation". Independent claim 29 also recites pruning according to threshold. In Lizee, a "query condition" is the presence of a specific word or its equivalent word expression in a document. (Col. 5, ll. 26-30.) Lizee tests only whole "query conditions" (e.g., "C2") against the database for matching records. (Col. 5, l. 66 - Col. 6, l. 14.) Lizee teaches at most ignoring (leaving unmarked) whole query conditions (e.g., "C2"), i.e., ignoring a specific word and all of its equivalents, where the query condition does not correspond to any items in the database. Lizee does not teach pruning candidate single-term interpretations, such as the second candidate single-term interpretation, where the first candidate single-term interpretation, for the same query term, is not eliminated. Lizee does not address the deficiencies of Schabes and Woods in this respect. Moreover, regarding the "reduced set" recited in claims 13, 15 and 31, Lizee tests query conditions against the whole database (col. 6, ll. 17-18, ll. 23-25.) and does not generate a "reduced set" as claimed in the present application. The whole database is not the same as the reduced set because the whole database could contain

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items that are not associated with any of the (first, second or third) candidate single-term

interpretations.

## Conclusion

All claims should now be in condition for allowance, and accordingly a notice of allowance is respectfully requested. If there are any remaining issues, the examiner is urged to contact applicant's attorney at the telephone number listed below.

The Commissioner is hereby authorized to charge any fee deficiency associated with this submission, or credit any overpayment to Deposit Account No. 08-0219.

A petition for a three-month extension of time is filed concurrently herewith. In the event that an extension of time is required in addition to that requested in the petition for an extension of time, the Commissioner is requested to grant a petition for that extension of which is required to make this response timely, and is hereby authorized to charge any fee for such, to deposit account number 08-0219.

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